Title: "Transformation and Processing of Web Form
Documents and Data for Small Footprint Devices"
Inventor: H. Fischer
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Content

125

Content
Server

130

Network

Gateway

135

138

139

Browser

Content
Transformer
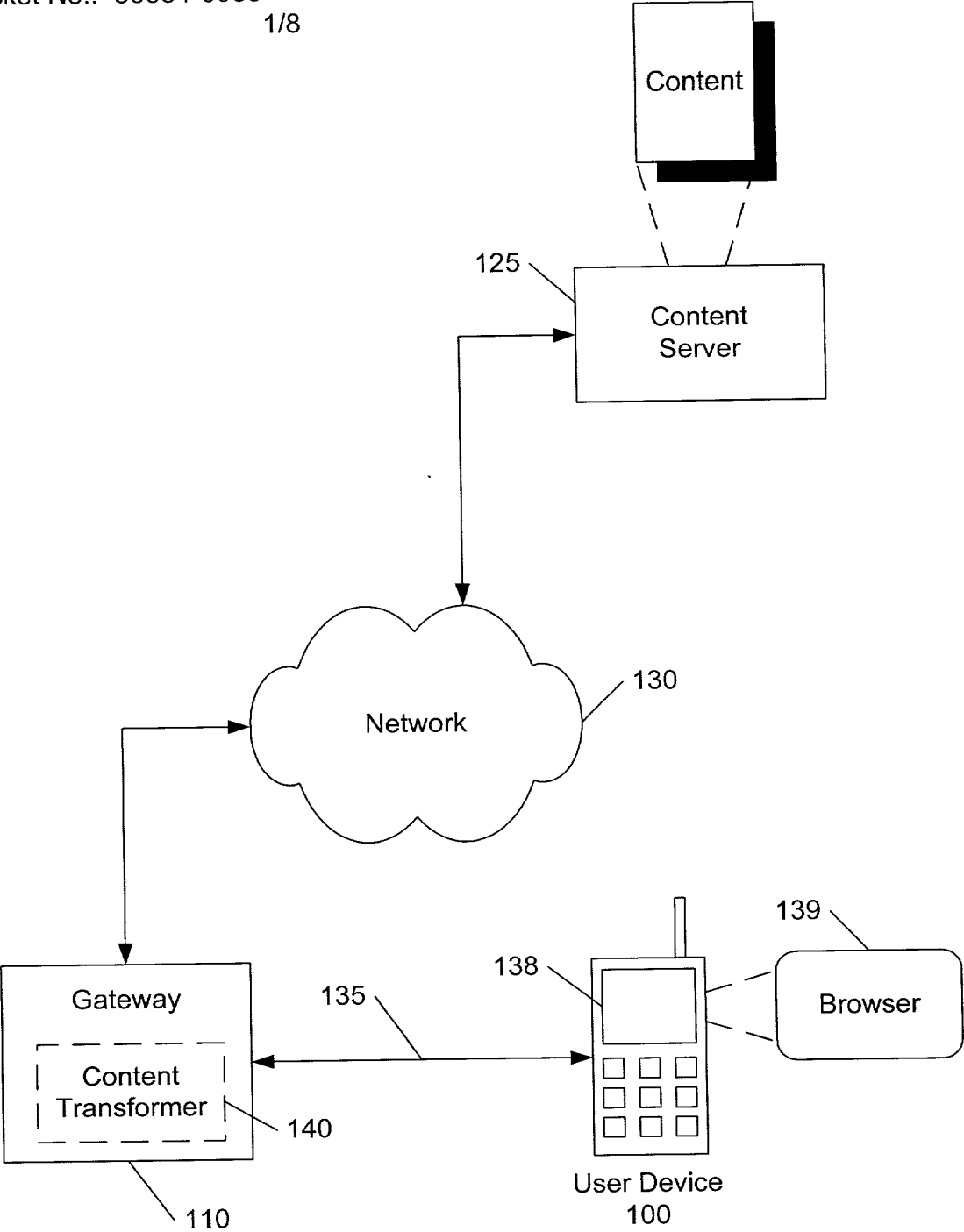
140

110

User Device
100

Figure 1

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205

Form	
Name	
Address	
City	
State	
Telephone	

215a
215b
215c
215d
215e

Submit

220

Figure 2

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205

Web
Page
(Native
Format)

Transformation

205

Web
Page
(User
Device
Format)

Content Server
125

Content Transformer
140

Gateway
110
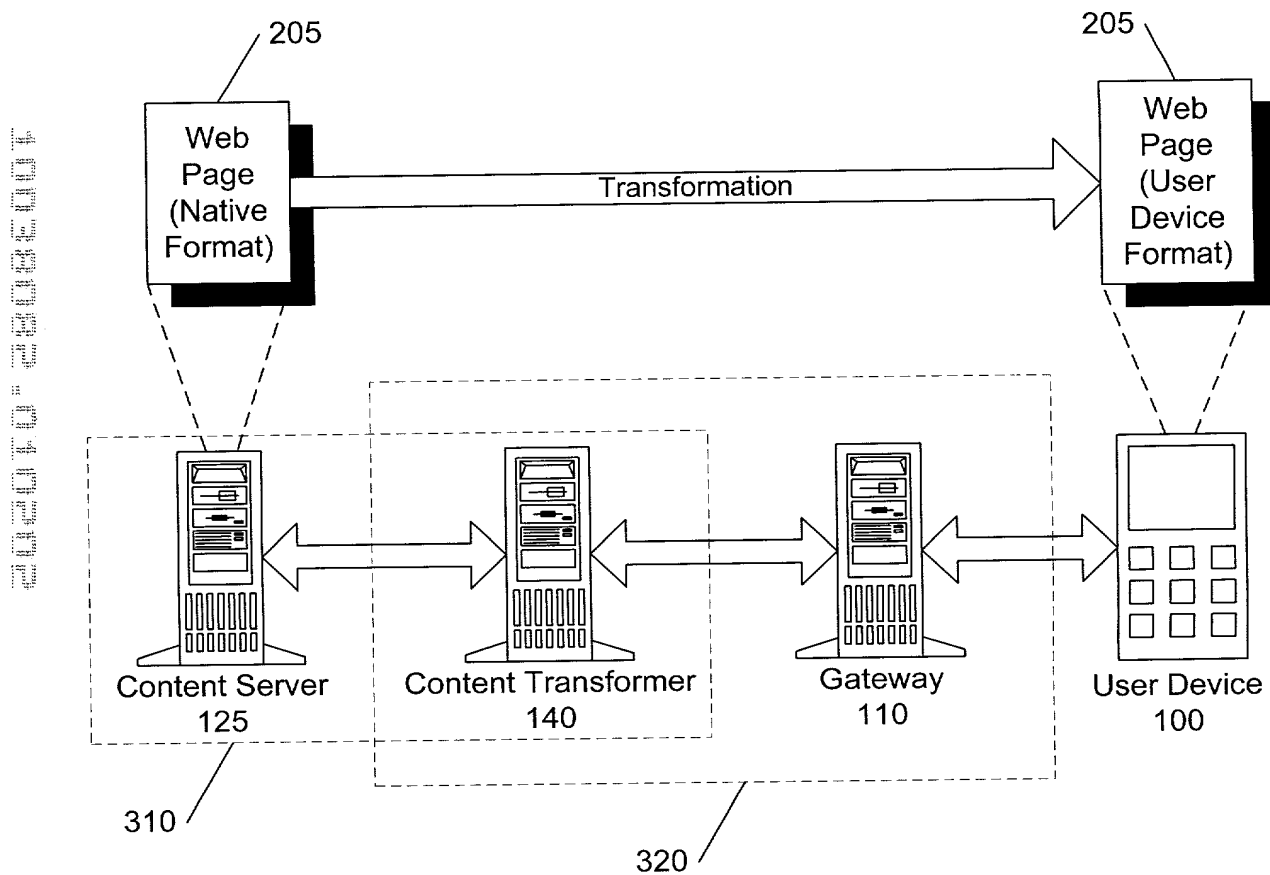
User Device
100

310

320

Figure 3

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(Begin)

↓

User device transmits request for
content.

410

↓

Gateway receives request for
content.

420

↓

Content transformer detects user
device and establishes session.

430

↓

Content transformer retrieves
content and transforms content
from native format to user device
format.

440

↓

Content transformer transmits
transformed content to user
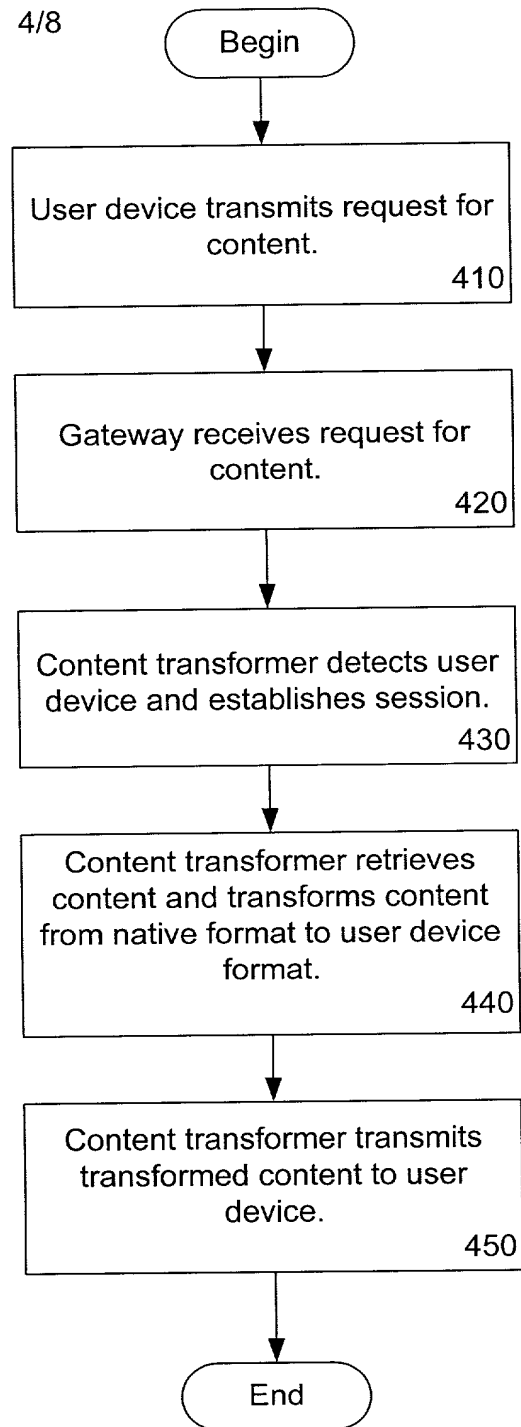device.

450

↓

(End)

Figure 4

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Form

Name _____ 215a

Address _____ 215b

205

City _____ 215c

State _____ 215d

Telephone _____ 215e

SUBMIT

220

Form ___ 515a

Name [_____]

Address [____]

515b

NEXT

522
525

517a

Form ___ 515c

City [_____]

State [____]

522

515d

BACK

NEXT

530 525

517b

Form

Telephone [____]
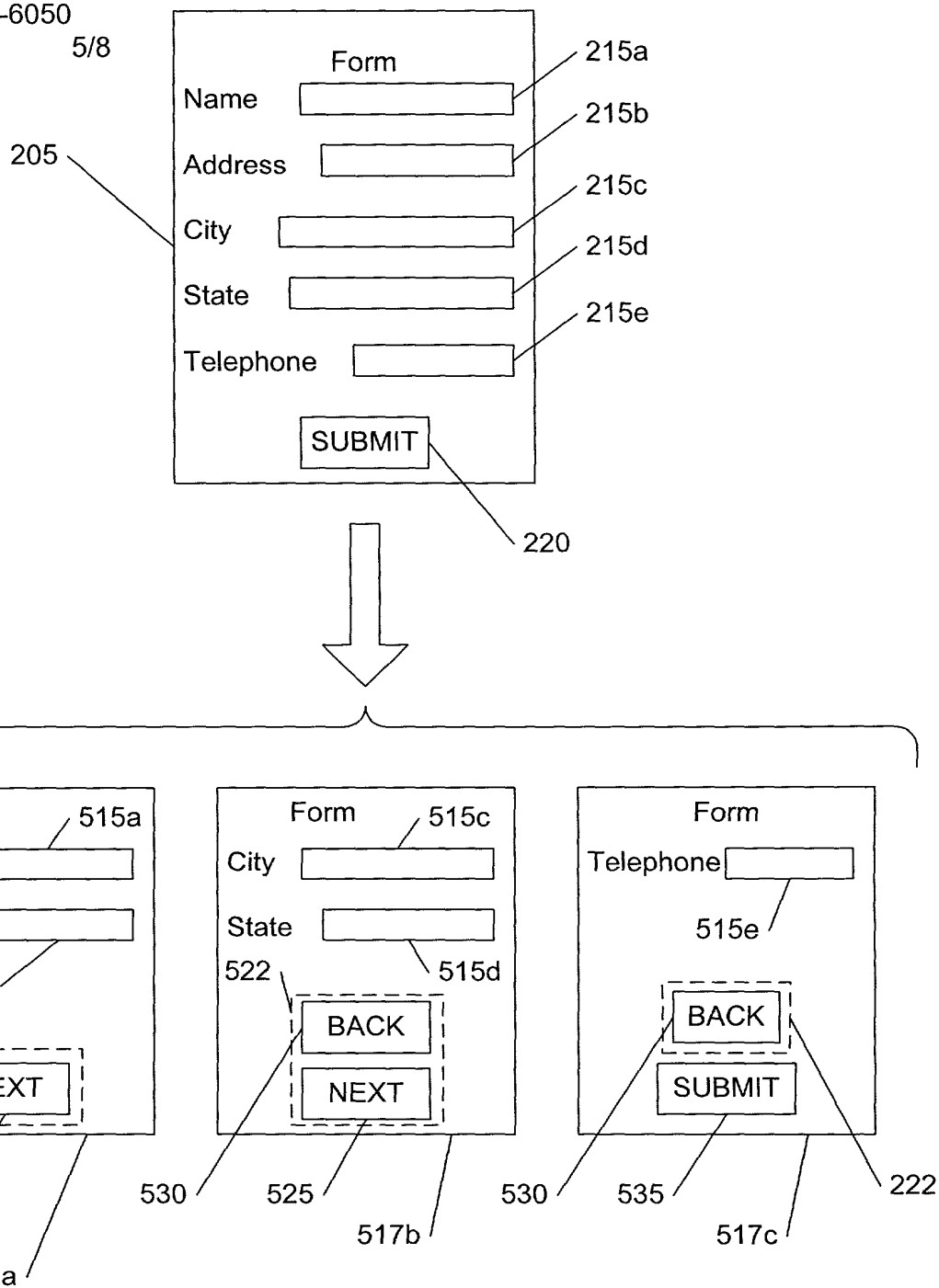
515e

BACK

SUBMIT

530 535

517c

222

Figure 5

Title: "Transformation and Processing of Web Form
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(Start)

Receive request for Web page
from user device.

605

Establish session for user
device and identify user device.

610

Retrieve Web page.

615

Determine whether Web page is
a form document.

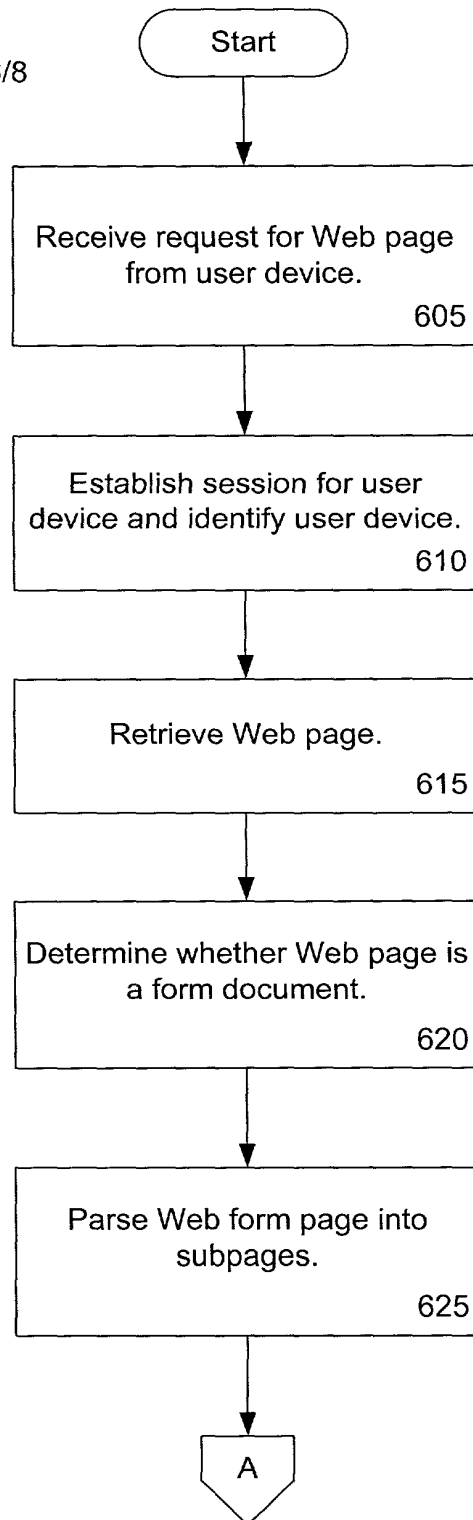620

Parse Web form page into
subpages.

625

A

Figure 6A

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```
   A
```

Send subdocument to
user device.

630

↓

Receive notification of
user action.

635

↓

Receive data from data
fields for current
subpage.

640

↓

Store data from
subpage in local data
store.

650

↓

Cycle ◁— User Action = cycle or
submit?

655

—▷ Submit

Obtain all data for
subpages from data
store.

665

↓

Send original form
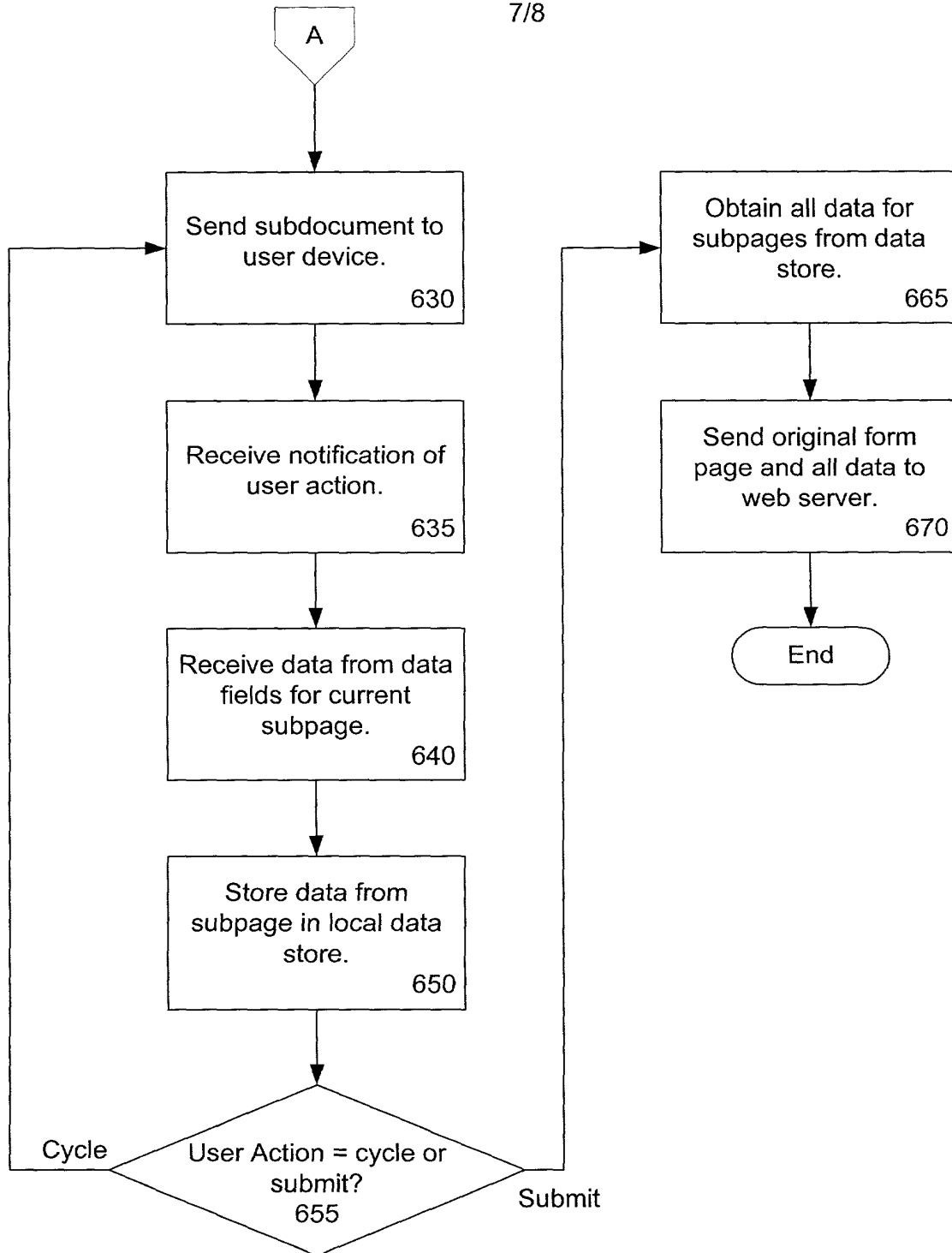page and all data to
web server.

670

↓

End

Figure 6B

Title: "Transformation and Processing of Web Form
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Inventor: H. Fischer
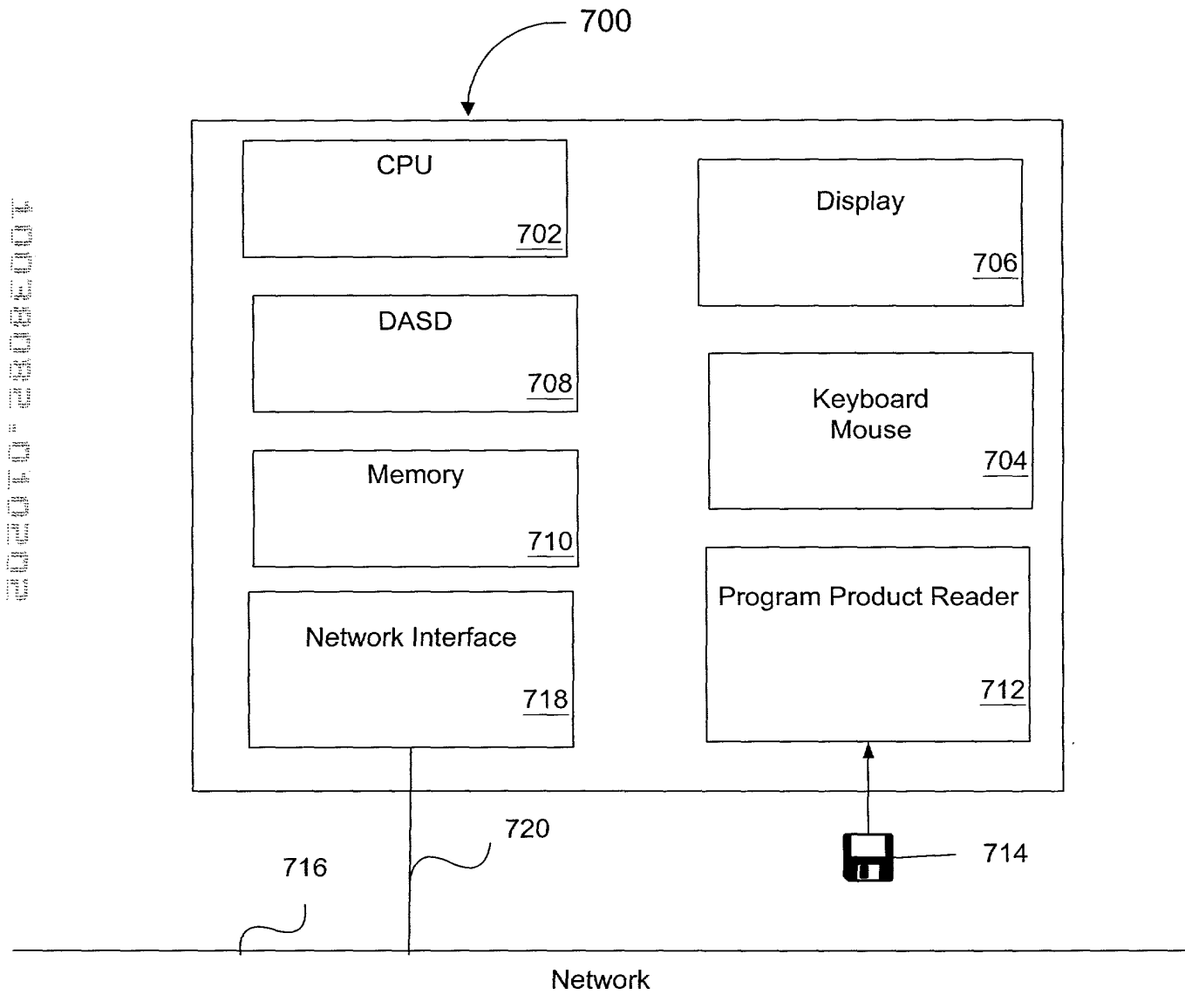Docket No.: 36584-6050
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700

CPU

702

DASD

708

Memory

710

Network Interface

718

Display

706

Keyboard
Mouse

704

Program Product Reader

712

720

716

714

Network

Figure 7